

# **PUBLIC NOTICE**

File Number: NRS12.195

Pursuant to Chapter 0400-4-7 of the Department's rules, the proposed activity described below has been submitted for approval under an Aquatic Resource Alteration Permit and §401 Water Quality Certification. This notice is intended to inform interested parties of this permit application and to ask for comments and information necessary to determine possible impacts to water quality. No decision has been made whether to issue or deny this application.

## **APPLICANT:**

City of Franklin Mark Hilty, Water Management Department 405 Hillsboro Road Franklin, Tennessee 37064 615-794-4554

## LOCATION:

Harpeth River in Franklin, Williamson County N 35.90870, W -86.85410.

### PROJECT DESCRIPTION:

The applicant is requesting an Aquatic Resource Alteration Permit that would authorize renewal of the City's permit to withdraw water from the Harpeth River for drinking water. The City of Franklin held an Aquatic Resource Alteration Permit (ARAP-NRS06.332), which was issued by the division on November 28, 2007, for withdrawal of drinking water from the Harpeth River.

The division has previously determined that the proposed withdrawal rate at 20 percent of the flow in the river would not result in an impairment of the uses designated to the Harpeth River when it was coupled with an additional requirement that the withdrawal would not cause the flow to fall below 10 cubic feet per second (cfs).

The city owns and operates a water treatment plant (WTP), originally constructed in 1952 with major upgrades completed in 1968 and 1994. The WTP's current rated treatment capacity is 2.1 million gallons per day (mgd). Water withdrawn from the Harpeth River is used to fill an earthen, off-stream raw water reservoir for later treatment at the WTP. The City requested a permit in 2007 to increase the rate and volume of water withdrawn from the Harpeth River.

Based on the issuance of the permit, the City has proactively made financial investments into implementing projects associated with this withdrawal including, but not limited to; the habitat restoration project that included the removal of a low head dam, the repair of the City's raw water reservoir, and completion of an Integrated Water Resource Plan (IWRP).

Issuance of the 2007 ARAP authorized an increase in the pumping capacity to 7,800 gpm, or 11.2 mgd under the following special conditions:

- 1. Flow in the Harpeth River shall not be reduced below 10 cubic feet per second (cfs) as a result of the withdrawal. This limit applies to all current and future withdrawals subject to this permit.
- 2. Water shall be withdrawn at a rate of no more than 20 percent of the flow in the river at the intake.

The 2007 ARAP required removal of a lowhead dam located just downstream of the existing intake. Since the issuance of that permit, the city has successfully removed the dam and conducted physical restoration of the stream channel at the site of the former dam.

## WATERSHED / WATERBODY DESCRIPTION:

The watershed is the Harpeth River watershed. The Hydrologic Unit Code (12) is 051302040105 Harpeth River-Spencer Creek. The watershed is located in Middle Tennessee in the Outer Nashville Basin (71h) ecoregion. The watershed includes parts of Cheatham, Davidson, Dickson, Hickman, Rutherford and Williamson Counties. It includes cool springs with moderate gradient originating in the Inner Nashville Basin and warm water streams with shallow gradient flowing over exposed limestone in the Outer Nashville Basin. The Harpeth River Watershed is approximately 863 square miles and drains to the Cumberland River. The mouth of the Harpeth River is at Cumberland River (Cheatham Lake) mile 152.9. For more information on this watershed please visit http://www.state.tn.us/environment/water/watersheds/harpeth-river.shtml.

The stream name is the Harpeth River. The stream segment ID is TN05130204016\_3000. The flow channel is twenty to forty feet wide in base flow conditions. This stream banks in this segment are typically steep, with mature trees and rock outcrops. The substrate is bedrock with gravel and sediment deposits overlain.

The drainage area at the intake is about 183 square miles. The U. S. Geological Survey (USGS) maintains a flow gauge about 0.9 mile downstream of the water intake. Because the gauge is located downstream of the intake, low flow data from this gauge is affected. However, basic low flow data shows that the Harpeth River at the USGS gauge at highway 96 flows less than twenty cubic feet per second (cfs) about twenty four percent of the days in a year, less than 10 cfs about sixteen percent and less than 5 cfs about 7% of the days.

This river segment is designated for the following classified uses: livestock watering & wildlife, irrigation, recreation, fish and aquatic life, industrial water supply, and domestic water supply. The segment was last assessed to determine the support of those uses on March 13, 2014. This river segment supports all of the uses for which it is designated except fish and aquatic life, for which the use is impaired. The listed cause of this impairment is limited dissolved oxygen and sedimentation/siltation is listed as grazing in the riparian or shoreline zones.

## **DEGRADATION:**

In accordance with the Tennessee Antidegradation Statement (Rule 0400-40-03-.06), the division has determined that a reduction in flow will result in degradation to water quality.

#### PERMIT COORDINATOR:

Robert Baker

**FACTORS CONSIDERED:** In deciding whether to issue or deny a permit, the department will consider all comments of record and the requirements of applicable federal and state laws. In making this decision, a determination will be made regarding the lost value of the resource compared to the value of any proposed mitigation. The department shall consider practicable alternatives to the alteration. The department shall also consider loss of waters or habitat, diminishment in biological diversity, cumulative or secondary impacts to the water resource, and adverse impact to unique, high quality, or impaired waters.

**COMMENTING:** Persons wishing to comment on the proposal are invited to submit written comments to the department. Written comments must be received within **thirty days of the date that this notice is posted**. Comments will become part of the record and will be considered in the final decision. The applicant's name and permit number should be referenced. Send all written comments to the department's address listed below and to the attention of the permit coordinator.

**PUBLIC HEARING**: Interested persons may request in writing that the department hold a public hearing on this application. The request must be filed within the comment period, indicate the interest of the person requesting it, the reasons that the hearing is warranted, and the water quality issues being raised. When there is sufficient public interest in water quality issues, the department will hold a public hearing. Send all public hearing request to the department's address listed below and to the attention of the permit coordinator.

**APPEAL:** A permit appeal may be filed, pursuant to T.C.A. §§ 69-3-105(i) and Rule 0400-40-05, by the permit applicant or by any aggrieved person who participated in the public comment period announced by this notice. This petition must be filed within THIRTY (30) DAYS after public notice of the issuance of the permit. The petition must specify what provisions are being appealed and the basis for the appeal. It should be addressed to the technical secretary of the Tennessee Board of Water Quality, Oil and Gas at the following address: Dr. Sandra Dudley, Director, Division of Water Resources, William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Ave, 12<sup>th</sup> floor, Nashville, TN 37243. Any hearing would be in accordance with T.C.A. §§69-3-110 and 4-5-301 et seq.

**FILE REVIEW:** The permit application, supporting documentation including detailed plans and maps, and related comments are available at the department's address (listed below) for review and/or copying.

Tennessee Department of Environment & Conservation Division of Water Resources, Natural Resources Unit William R. Snodgrass Tennessee Tower 312 Rosa L. Parks Avenue, 11th Floor Nashville, Tennessee 37243





